NOTES ON CERTAIN TAXA OF THELYPTERIS (THELYPTERIDACEAE)OF ASIA-II.

G.Panigrahi

Regional Botanist, Botanical Survey of India at Kew.

In continuation of my earlier note on <u>Thelypteris</u> Schmidel (see Panigrahi, 1975), the following further notes on certain taxa have been prepared.

- 1. THELYPTERIS BLUMEI Panigrahi in Phytologia 30:409(1975).
- <u>T.blumei</u> shares with <u>T.subpubescens</u> (Bl.)K.Iwts.,pro parte, the erect or suberect caudex with tufted fronds,basal pinnae gradually reduced, pinnae lobed c.i/4 towards costa,rhachis,costae and pinnae + hairy('not entirely glabrous' as stated inadvertently for <u>T.subpubescens</u> in line 5 at appe 410,Panigrahi l.c.). The two species,however, differ from each other as set out below:

 - 4-5 pairs of basal pinnae reduced and strongly auricled, auricles stiffly acuminate and strongly crenate, pinnules subsessile, caudate-acuminate, base cuneate, pinna-lobes strongly oblique and crenate, $l-l\frac{1}{2}$ pairs of veins anastomosing and sinus with a long callus......
 - 2. THELYPTERIS HILSENBERGII (Presl) Panigrahi, comb.nov.
- Nephrodium hilsenbergii Presl [Tent.Pterid.:81,1836,nom.nud.],Epim.

 Bot.:47(1851).Type: " in Insula Mauritii (Hilsenberg)"(not seen);

 Aspidium hilsenbergii Sieb.,Syn.Fil.Exsic.No.49, nom.nud.;

 Cyclosorus repandulus sensu Panigrahi & Manton in Journ.Linn.Soc.,

 London,Bot. 55:729-743,text figs,l(left),3(f) as C.contiguus (Rosenstock)Ching,non(?) Dryopteris repandula v.Alderw.v.Rosenb.(1924);

 Christella hilsenbergii (Presl) Holttum in Journ.South Afr.Bot.40

 (2):142(1974).

Presl(1836,1851) based <u>Nephrodium hilsenbergii</u> on <u>Aspidium hilsenbergii</u> Sieber, Syn. Fil. Exsic. No. 49[nom. nud.] but typified the species by Hilsenberg s.n. from Mauritius, as cited above. I have not seen this specimen but there are two specimens at p.t.c. 369

the Kew Herb., collected by Sieber from Mauritius and to both of which, a printed label "Sieber, Syn. Fil. no. 49" is pasted. Of these one has the lowest pair of pinnae the largest as in the type of Dryopteris repandula v. Alderw. v. Rosenk. (L) and the other has it reduced than the pairs above; otherwise, they are similar and are identical with my Ceylon plants identified earlier with Cyclosorus repandulus (v. A. v. R.) Ching and C. contiguus (Rosenst.) Ching (see Panigrahi & Manton, 1958).

3. THELYPTERIS GRIFFITHIANUS (Fée)Panigrahi,comb.nov.

Nephrodium griffithianum Fée, Gen. Fil.: 305(1852). Type: Sri Lanka,
(Ceylon), Griffith s.n. (not seen).

Fée(1852) founded Nephrodium griffithianum based on Griffith s.n. from Ceylon and described it, in French, very briefly as a terrestrial fern with a creeping rhizome as thick as a pen, stipe slender, pinnae well-spaced, slightly stalked, pinnules crenulate, carrying only 2 or 3 sori. He, however, questioned if this soral character was a normal habit of this species and stated that the dimensions of this species was less than those of N.dicarpum Fee, which he simultaneously described in Latin and based it on De Montbrison s.n. from Bourbon island (ReUnion). Unfortunately, Christensen in Index Filicum(1905) and in subsequent Supplements missed indexing N.griffithianum Fee, presumably because Fee(l.c.) had not assigned it a separate number_but merely included it as an observation below N.dicarpum Fee numbered as species '1' at page 305 and had not included it in his ' Table Generale Alphabetique at page 380. As a result, N. griffithianum Fee from Ceylon has escaped attention of the pteridologists working on Asiatic ferns upto-date.

It has not been possible for me to locate the type of N.griffithianum Fée, as is usual with the types of many of the species described by Fée, either at Paris or at Strasbourg. It is also not known how Fée could have received the specimen from Ceylon supposedly collected by Griffith as there is no evidence that Griffith had ever made any collections from Ceylon, unless, of course, he would have made some sporadic collections from the island during his stop-overs from India to U.K. and back and left those collections with Thwaites who is known to be sending his collections to Fée for his study.

I am grateful to Prof.R.E.Holttum for assistance in translating the French text referred to above and for much fruitful discussions., and useful suggestions from time to time.

4. THELYPTERIS ARTICULATA (Houlst.& Moore) Panigrahi, comb.

Nephrodium articulatum Houst. Moore, Gard. Mag. Bot 3: 293(1851);

N. abruptum sensu Bedd., Ferns South India: t.86(1863), non Desv. (1827);

N. pennigerum sensu Bedd. Handb. Ferns Brit. India, Ceylon & Malay
Penins.: 277(1883) & Suppl.: 73-74(1892), non Forster (1786); N. glandulosum(Bl.) J. Sm. var. laete-strigosum Clarke, Trans. Linn. Soc. II, Bot. 1
:532, t.74, fig. 2(1880); Dryopteris indica v. Alderw. v. Rosenb., Mal.

Ferns: 224(1908); Thelypteris indica (v. Alderw. v. Rosenb.) Reed in
Phytologia 17(4): 284(1968); Pronephrium articulatum (Houst. &
Moore) Holttum, Blumea 20(1): 116(1972).

Van Alderw.van Rosenburgh(1908) cited Nephrodium pennigerum sensu Beddome(1892) as a direct nomenclatural synonym of <u>Dryopteris indica</u> v.Alderw.v.Rosenburgh.Therefore, the latter as also <u>Thelypteris indica</u> (v.A.v.R.) Reed must be treated as conspecific with <u>T.articulata</u> (Houst.& Moore),comb.nov.,as shown above.

5. THELYPTERIS GARDNERI (Holtt.) Panigrahi, comb.nov.

Pronephrium gardneri Holttum in Kew Bull.26:81(1971); Nephrodium urophyllum (Wall.ex Hook.) Bedd., Ferns South India, Suppl.:18(1876); Handb. Ferns Brit. India: 274(1883) pro parte; Goniopteris urophylla (Wall.ex Hook.) Bedd., Ferns South India: 79, t. 239(1864) pro parte, quoad Thwaites 3063.

Apart from the type (viz. Ceylon, Gardner 1137, not 1135 as cited by Holttum(1.c.), I have examined the following specimens: Ceylon, Thwaites s.n.(K); Ceylon, sent in 1848 and 1853, Gardner s.n.(BM).

6. THELYPTERIS STENOPODUM (P.Chandra) Panigrahi,comb.nov.

Pronephrium stenopodum P.Chandra in Holttum et Chandra, Kew Bull.
26(1):81(1971), Type: India, Assam, North Cachar Hills, Haflong,
P.Chandra 81109(Holotype, K). Distribution: Assam, known only

from the type collection.

7. THELYPTERIS SUBTRUNCATA (Bory) Panigrahi, comb.nov.

Polypodium subtruncatum Bory in Bel. et Bory, Voy.aux Ind.Orient.

1825-29, Bot.Crypto.2:32(1833); Nephrodium truncatum sensu Bedd.

Handb::220(1883) pro parte, non Polystichum truncatum (Gaud.) Gaud.

(1827); Mesochlaena polycarpa sensu Blatter & d'Almeida, Ferns Bombay: 124, fig.41, a, b (1922), non (Bl.) Bedd. (1883); Sphaerostephanos subtruncatus (Bory) Holttum in Kew Bull. 26(1): 80(1971).

While describing <u>Polypodium subtruncatum</u>, Bory(1833) referred to a number of specimens collected by Belanger from the East and West coast of India, mountains of Dindygul (Madras), Pegu(Burma) and Mauritius. Therefore, the specimens cited by him have the status of syntypes and I select here <u>Belanger</u> s.n. from Dindygul (Dendigall) (P) as lectotype.

Beddome(1883) cited Tinnevalley under Nephrodium truncatum and the specimen from south Tinnevalley Chat,610 m, Beddome s.n. labelled Nephrodium truncatum var.?(K) is indeed Thelypteris subtruncata. Whether in citing Tinnevalley under N.truncatum, Beddome had this specimen in mind, is a matter of conjecture only.

8. THELYPTERIS PARISHII (Bedd.)Panigrahi,comb.nov.

Meniscium parishii Bedd., Ferns Brit. India: t.184(1866); M. triphyllum var. parishii Bedd., Handb. Ferns Brit. India, Ceylon & Malay Penins. :399(1883); Cyclosorus parishii (Bedd.) Tardieu ex Tard. et C. Chr. in Notul Syst. [Paris] 7:76 (1938); Pronephrium parishii (Bedd.) Holtt. in Blumea 20(1):123(1972).

Distribution: India, Sri Lanka, Bangladesh, Indo-China and Malay Peninsula.

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